EXHIBIT

Duke Energy Carolinas, LLC's and Duke Energy Progress, LLC's Response to SC Office of Regulatory Staff Data Request No. 7-17

> Docket No. 2019-224-E Docket No. 2019-225-E

Date of Request: Date of Response: September 8, 2021 September 22, 2021

CONFIDENTIAL

Confidential Responses are provided pursuant to Confidentiality Agreement

NOT CONFIDENTIAL

The attached response to SC Office of Regulatory Staff, was provided to me by the following individual(s): Matthew Kalemba, Director DET Planning and Forecasting, and was provided to the SC Office of Regulatory Staff under my supervision.

Heather Shirley Smith Deputy General Counsel Duke Energy Carolinas, LLC and Duke Energy Progress, LLC

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DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC

To the extent information differs for DEC and DEP, provide the different information, otherwise please note the information provided is the same for both.

Request:

7-17 Concerning the assumed \$38/MWh price for solar resources, DEC states on page 26, "DEC's and DEP's ability to actually procure solar in the future at this price point is uncertain and will depend on future statutory and regulatory action." Please list the factors that make acquiring at this price uncertain, and identify the statutory and regulatory actions that would have to be taken in order to be able to purchase at this price.

Response:

The factors that make acquiring solar at this price uncertain include:

- Increasing land costs:
 - The Companies have already interconnected over 4,000 MW of solar across their systems in the Carolinas. As stated in the IRP, the greater the solar saturation on the DEC and DEP systems, the harder it is to find inexpensive land with low interconnection costs.
- Supply chain and raw material constraints:
 - O As the Solar Energy Industries Association ("SEIA") points out in its Solar Market Insight Report 2021 Q2¹, published in conjunction with Wood Mackenzie Power & Renewables: "Over the last several quarters, critical components for solar equipment polysilicon, steel, aluminum, semiconductor chips, copper and other metals have become increasingly supply-constrained. The dynamics around each commodity are nuanced. But increasing demand for solar, combined with pandemic-related macroeconomic realities (such as increased shipping costs, microchip availability, and a residential home renovation boom) have led to increased commodity prices and delivery delays." SEIA points out that the most significant impact is on utility scale projects under development. "Developers are approaching offtakers to renegotiate their PPAs to increase prices or relax online dates. So far, efforts to increase PPA prices on existing contracts have not been very successful in a hyper-competitive market. This will be an important issue to watch throughout 2021 and beyond." Unless market

¹ Solar Energy Indus. Assoc., Solar Market Insight Report 2021 Q2 (June 15, 2021), available at https://www.seia.org/research-resources/solar-market-insight-report-2021-q2

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dynamics change, increasing demand for solar will likely lead to rising costs in the short-term, and perhaps beyond.

- Increasing labor costs:
 - o Similar to supply chain and raw material constraints, a general labor shortage can lead to increased installation costs for all resources.
- Recent experience:
 - As noted in the DEC SC Modified IRP, of the approximately 1,200 MW of solar resources procured over the first two tranches of the NC CPRE Program, only about half have been contracted at or below \$38/MWh.

While not advocating for or against any particular policy, examples of further statutory and regulatory actions that would support solar being acquired at these price levels include, but are not limited to:

- Federal or state solar tax incentives at levels greater than those in place today and extended further in time;
- Favorable changes in federal or state policies that govern transmission additions and cost assignments for such additions; and
- Global trading policies that promoted the required supply chain and manufacturing requirements for solar components.